

HEIDELBERGER

walked in. Stanley stopped playing and said, "Meet Nina!" Would Aristotle have called this "chance" or "luck?" Companionship with Nina Tachau was a joy, and the following June we were married. Our son, Charles, was born in 1920; his mother died of cancer in 1946: we had been comrades for 31 years and had helped each other in our respective careers, for Nina was a writer and later became a frequent speaker for the American Association for the United Nations and chairman on foreign policy for the New York City League of Women Voters. While on this personal note, I might as well tell of living alone for the next nine years, buoyed by the excitement of the laboratory, the encouragement of warm friends, and visits to my son and his growing family. A good friend, Nellie Doogan, who had been in the family for years, came in daily to cook breakfast and clean; another, Anna Greene, cooked dinners two or three times a week. Then, one evening, I was invited to play the Mozart trio for clarinet, viola, and piano by Vally Weigl, widow of Karl Weigl, the composer. The violist was Charlotte Rosen, an outstanding musician and a cheerful, outgoing woman who had been a concert violinist in her native Germany and whose husband, a dermatologist, had died several years before. Though she lived in the same apartment house I did, I had never seen her, as she went to the second floor via the stairs while I used the elevator to the tenth. We walked home together, and again chance or luck and music brought companionship that ripened into marriage. With two happy marriages in one lifetime, I count myself among the most fortunate.

One of my duties as 1st Lieutenant at U.S. Laboratory No. 1 in 1917-18 was to march the visiting medical captains, majors, and lieutenant-colonels up and down while teaching them the Sanitary Detachment Drill, which I had learned at Plattsburg. This was also the year of a severe epidemic of influenza, at that time thought to be caused by an influenza bacillus. Dr. Martha Wollstein, of the Institute, prepared a vaccine from this bacillus and I persuaded all of my close relatives to receive injections of it. None of us caught the viral disease! Chance, once more!

At the close of the war, Jacobs and I decided that we had had enough of pure synthetic organic chemistry, but Dr. Flexner, an ardent believer in chemotherapy, insisted that we tackle bacterial infections, notably pneumococcal and streptococcal diseases. Lloyd D. Felton joined us for the testing in animals, and we started to synthesize increasingly active bactericides, including a number of cinchona alkaloidal derivatives (8-8b) more potent in vitro than Optochin (12), which had been used with some success against local pneumococcal infections. However, the combination "drug and bug" usually killed the test mice more quickly than the drug alone. One of the intermediates that we converted into such useless substances was para-aminophenyl sulphonamide, or Sulfanilamide, which the Tréfouels, Nitti & Bovet (21) found to be the active portion of the purple dye for which Domagk received the Nobel Prize in 1939. That so simple a substance could cure bacterial infections by a mechanism other than direct killing of the microorganisms never occurred to us. If it had, we might have saved hundreds of thousands of lives in the twenty years before Domagk, the Tréfouels, Nitti, and Bovet made their discoveries. I always told this story in lecturing on chemotherapy in the course on biochemistry at the College of Physicians and Surgeons of Columbia University and begged the students never to allow themselves to become slaves of an idea.

Memo/Reply From

JOSHUA LEDERBERG

TO:

Jim
Jules Hirsch

JAN 16 1980

"Delay" re
Research problems Antibiotics

This history in fact is one of my main goals. I want us to be more self-conscious about the possibility of being victimized again, and sensitized to the terrible price that this exacts. As scientists we assume a profound responsibility that no one else can fulfil.

J.

Joshua Lederberg
President
The Rockefeller University
New York, N.Y. 10021
(212) 360-1234